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3 **GRAVITY-ACTUATED SUBMARINE ANTENNA**

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5 **ABSTRACT OF THE DISCLOSURE**

6 An antenna including a feed tube with radial fins and
7 circular plates at the ends of the tube and fins thereby forming
8 a boundary for a plurality of resonant cavities. Curved plates,
9 connected to the tube by switches of a switching system,
10 partially encompass and subtend to the length of the tube.
11 Interior to the tube, a transmission line from an end plate
12 terminus conducts radio-frequency energy from the terminus to a
13 hub and onto a switch of the switching system in which the
14 switch is mechanically reactive to and actuated by a righting
15 action of the curved plates when the curved plates encounter a
16 sea state. When actuated, energy from the switch distributes to
17 a proximate resonant cavity and curved plate to form a radiation
18 pattern based on the difference in phase of the resonant cavity
19 and curved plate.